

ANNALS of the Association of American Geographers

VOLUME XXIII

DECEMBER, 1933

No. 4

Geographic and Political Boundaries in Upper Silesia

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INTRODUCTION

Problems connected with political boundaries have frequently elicited the interest of geographers. In all countries with chronic or acute boundary problems the geographers are drawn into the general discussion, more or less as experts, and in some cases the professional geographer has actually been called upon to assist in the determination and demarcation of boundaries. The interest of the geographers in this subject appears to be strikingly practical rather than academic. While almost every geographer in Europe has concerned himself at some time in the past twenty years with some particular boundary problem, very few have attempted any systematic theoretical study of the problem as a whole.¹ It could easily be shown that the practical contributions

¹The late Professor Sieger (Graz) stimulated the most valuable discussion of terminology in political geography, particularly in reference to boundaries, both in his teaching and in his scattered publications. The most important references in this discussion are listed below, together with other recent studies of significance on this subject. An excellent brief analysis of the suggestions of various writers is given by Sölch; the fullest discussion and bibliography by Maull.

Sieger, R.: "Zur politisch-geographischen Terminologie," *Zeitsch. d. Ges. f. Erdkunde* (Berlin), 1917, pp. 497-529; 1918, pp. 40-70. Articles under various titles, on the same subject in: *Oester. Rundschau*, 1917, pp. 260-70; *Deutsche Arbeit*, Dec. 1921; *Petermann's Mitteil.*, 1923, pp. 252-6; 1925, pp. 57ff; *Verh. d. XXI Deutschen Geogr.-Tags.*, (Berlin), 1926.

*The field work on which this study is based was made possible by a Fellowship for the year 1931-32, from the Social Science Research Council.

of geographers to the specific problems have suffered greatly from this lack of academic preparation. For the most part their work shows the earmarks of knowledge expert but unorganized; lack of technique, no recognized terminology, and no means of measurement. Hence the pursuit of such vague concepts as "natural boundaries," a term seldom defined and usually meaning something different to each writer, and which Sieger, Maull, and Sölch have all admirably demonstrated should be banned from scientific literature.

The purpose of this paper is to suggest a method and some terminology that might be applicable for any border study. Upper Silesia will serve as the specific case study to be treated from the laboratory point of view.

This area is a part of the great border belt between Germans and Slavs, more specifically a border corner where Germans, Poles, Czechs, and Slovaks meet and mix. Divided politically before the war among three empires: Germany, Austria-Hungary, and Russia, it is likewise divided now, but with different lines, between Germany, Poland, and Czecho-Slovakia (Fig. 1). Although in many respects geographically united, the area has never had political unity within itself, but rather was always a peripheral zone subject to the political expansion of neighboring states. In the course of the latter Middle Ages the various feudal duchies into which Silesia was divided were controlled successively by the kings of Poland, Bohemia, and finally, Austria. The separation of Silesia from Poland dates, for practical purposes perhaps from 1163, formally certainly from the renunciation of Silesia by Casimir the Great in 1335.² Prussia entered the area first in the early

Penck, A.: *Ueber politische Grenzen*. (Rektoratsrede, Berlin, 1917).

Fawcett, C. B.: *Frontiers*. (Oxford, 1918).

Vogel, W.: *Politische Geographie*. (Leipzig, 1922).

— "Zur Lehre von den Grenzen und Raumen," *Geogr. Zeits.*, 1926.

Sidaritsch: "Landschaftseinheiten und Lebensraume in den Ostalpen," *Petermann's Mitteil.*, 1923, pp. 256-61.

Sölch, J.: *Die Auffassung der "natürlichen Grenzen" in der wissenschaftlichen Geographie*. (Innsbruck, 1924).

Maull, O.: *Politische Geographie*. (Berlin, 1925), pp. 133-45, 601-25. *Politischen Grenzen*. (Berlin, 1928).

Haushofer, K.: *Grenzen in ihrer geographischen und politischen Bedeutung*. (Berlin-Gruenwald, 1927).

²Laubert, Manfred: *Die preussische Polenpolitik, 1772-1914*. (Berlin, 1921), ch. ix.

eighteenth century when Frederick the Great, by means of the Silesian Wars, forced Maria Theresa to cede him the rich lowland of Lower Silesia, together with the then unimportant lowland of Upper Silesia. The highland areas, together with the Moravian Gate between them, remained however with Austria. Silesia therefore has been separated from Poland on the east for six or seven



FIG. 1.—Place Map of the Area

Symbols:

1. Present international boundary
 2. Former international boundary
 3. Provincial boundaries
 4. County (Kreis) boundaries in Upper Silesia only (not shown in industrial district)
 - 5-8. Cities and towns:
 5. Nearly 100,000 population or more
 6. From 25,000 to 75,000
 7. From 10,000 to 25,000
 8. Less than 10,000
- Towns underlined are centers of counties of the same name

centuries and united more or less closely, to different states, chiefly German, on the south and west. It had no part in the historic divisions of Poland of the eighteenth century, which gave Galicia to Austria, Posen to Prussia, and the area between to Russia.

NATURAL DEFENSE BOUNDARIES

Perhaps because European boundaries are most commonly determined after armed conflict, the first consideration in drawing them has usually been their defensive character. In the Upper Silesian border area, strong natural lines or zones of defense are not to be found. The low mountains of the Sudetes and the Beskides, broken by many valleys, offer but minor aids to defense—in comparison say, with the High Tatra farther east between Poland and Slovakia. Far more open is the plain on the north, continuous from Germany into Poland, for the most part sufficiently well-drained by the headwaters of the Oder and the Vistula, and offering no obstacles excepting the minor ones presented by those streams (Plate A).

Likewise for the purposes of peace-time control of the boundaries—against smuggling, etc—little assistance is offered by nature. Only the rivers, where large enough to be uncrossable except by bridge or boat, are of some aid to the border patrol, and smuggling flourishes as one of the ordinary occupations of the region.

BOUNDARIES MARKED IN NATURE

International boundaries, particularly in well-populated areas, must be clearly and accurately marked. In former times boundary commissions depended so far as possible on any natural lines that could be used. In some parts of the Sudetes and the Beskides the crest-line is sufficiently well-marked to furnish such a line, but more commonly neither crest-line nor watershed is readily visible. This is particularly true on the plain, so that though the division there between Germany and Poland is roughly that of the drainage basin of the upper Oder on the one hand, and the Vistula and the Warta on the other, the actual watershed, hardly visible in the landscape, has never functioned in boundary drawing. Only the streams offer this second type of natural boundaries, which can better be called *naturally marked boundaries*, or *boundaries marked in nature*.³ For this purpose small streams are as suitable as large

³From Sölch's "naturgemarkten" or "natur-marken," corresponding to Sieger's "naturentlehnten."

ones, perhaps even more so because more accurate. The centuries-old boundary between Silesia and Poland utilized such smaller streams through most of its course, whereas the most recent boundaries largely ignore them. These were drawn in the age in which international boundaries are marked with lines of stones each visible from the next. Even then, however, the careless pedestrian, or child, may unwittingly find himself in the wrong country and be arrested under suspicion of smuggling or espionage (Plate B).

The discussion so far has treated boundaries from the point of view of the bounding states as space-organisms requiring a defensive epidermis, so to speak, against undesirable invaders, whether armies, smugglers, or immigrants.⁴ But this point of view overlooks the original, primary function of boundaries, namely, to *bound*, i.e. to determine the limiting line on the earth's surface on one side of which all men and things are subject to the jurisdiction of one state, whereas the moment that line is crossed everything is subject to another state. Such a line has therefore enormous effect on the lives of the people whose citizenship it alone determines. Not merely under what government they must live, for what state be ready to fight and die, but even where they may sell their products, where purchase their supplies, what language their schools must, for the most part, use, what history, literature and songs their children will be taught, under what national, cultural, and moral influence they will be brought up—all of these are determined for millions of people by the exact location of an international boundary line in such an area as this.

The remainder of this paper, therefore, is based on the assumption that where international boundaries run through settled areas, it is those areas rather than the bounding states that are most concerned, the inhabitants of the border regions rather than those in the internal areas of the states who are most to be considered in studying or locating boundaries.

The proper study of an international boundary is, then, primarily concerned with the *associations*, of all kinds, of the different parts of the border area with each of the bordering states. The geographer in particular is interested in those associations

⁴The point of view well expressed in the suggestive paper read by Mr. S. W. Boggs before the Association of American Geographers at Ypsilanti, Mich., Dec. 21, 1931, "Boundary functions and the principles of boundary-making." Abstract in the *Annals*, March 1932, p. 48; published in full in *Press Releases*, U. S. Dept. of State, Jan. 2, 1932.

which he observes in the features of the landscape, but he may not leave out of consideration other very important associations. In both cases the associations are of two kinds: those *similar* in character and those which, though perhaps *dissimilar*, have *mutual interests*. Each of these groups will be studied in detail.

BOUNDARIES BASED ON AREAS SIMILAR IN LANDSCAPE FEATURES

Along margins of areas similar in landscape features, "natural boundaries" of a third sort can be drawn. Sölch calls these *choren*

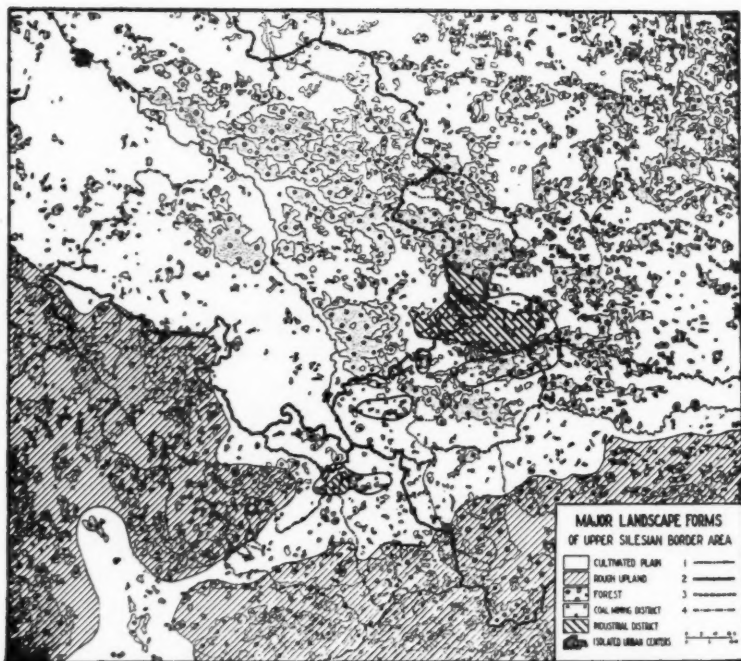


FIG. 2.—Major Landscape Forms of the Upper Silesian Border Area

Symbols:

1. Watershed between the basins of the Upper Oder, Warta, Vistula, and March (Danube)
2. Present international boundary
3. Former international boundary
4. Provincial boundaries

grenze or chorographic boundaries.⁵ The map⁶ (Fig. 2) shows six major types of landscape forms. Four are rural landscapes resulting from combinations of two principal contrasts: that between the low mountains and hill country on the south, and the level to gently rolling plain on the north, and that between cleared and cultivated land and extensive forests—the latter covering great stretches of sandy soil on the plain as well as the rougher parts of the highlands.⁷ Though these differ notably in appearance, they produce no *major* differences in interest such as would be served by, or of themselves justify, separation into different states. Quite different is the case of the mining and industrial landscapes developed on the continuous coal-field in one small part of the area. Here the population has in many respects more in common with that of Westphalia, the Black Country of England, or the Pittsburgh area than with its neighboring rural districts.

Something, therefore, might be said for a political separation of the entire mining and manufacturing region as a separate political unit were it not for the lack of any historical basis.⁸ But certainly the division of the industrial district into different states causes constant difficulties because of the multiplicity of associations that normally tend to develop between adjacent industrial towns. These will require more detailed treatment later.

Although the rural landscapes offer no major differences east and west of the border zone, they do show minor differences in the character and extent of development that are highly significant in reflecting differences in the social character of the populations. Some of these are suggested by the maps and pictures.

Fundamental is the marked decrease in accessibility to both

⁵Corresponding, in part, to Sieger's "Naturgebietsgrenzen" or Maull's "Strukturgrenzen."

⁶The map is drawn from the official German maps (Reichsamts f. Landesaufnahme, Berlin) chiefly the Top. Karte 1: 200,000. The distinction between plains and hill country is based on slopes, rather than mere elevation, though the boundary follows roughly the 400-meter contour.

⁷The classic geography of the area is Partsch, J.: *Landeskunde von Schlesien*. (Breslau, 1903). Excellent maps are to be found in *Wirtschafts- und Verkehrs-geographische Atlas von Schlesien*, Geisler, W., ed. (Breslau, 1932), but these include only the parts of the area now in Germany.

⁸A small organized movement in 1919-21 for a free-state of Upper Silesia, to include also Teschen Silesia, met apparently with little support.

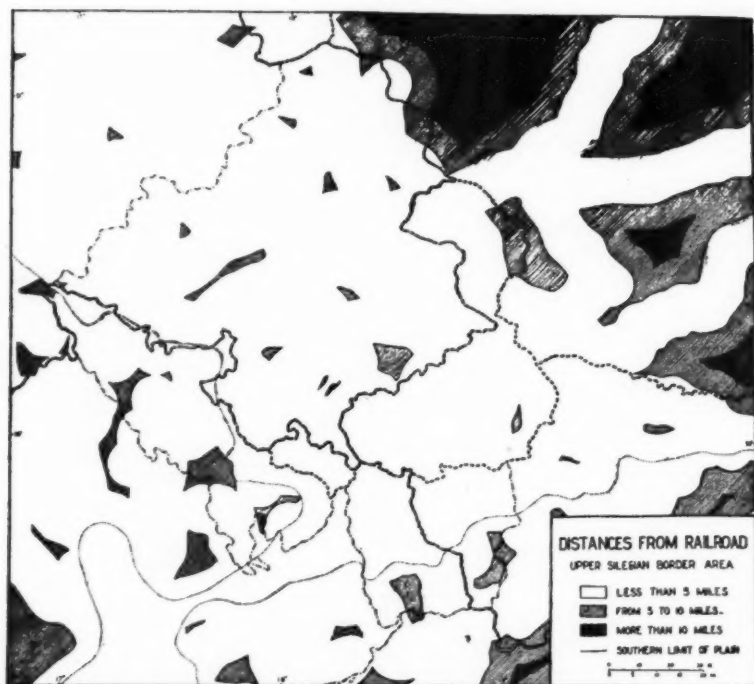


FIG. 3.—Distances from Railroad, Upper Silesian Border Area

railroads and road, east of the old Polish frontier (Figs. 3 and 4). Even more marked is the difference in the quality of the roads. There are no paved roads, hard-surfaced roads are few, even the main routes between the largest cities are sometimes little more than field tracks.⁹ In consequence rural life is on a much more primitive subsistence basis.

While the fields show the same crops: rye, wheat, oats, hay, and the all-important potatoes—lesser care in cultivation and less use of fertilizers are reflected in notable decrease in crop yields,

⁹The maps, both German and Polish, on which the road map is based proved to be very liberal in designating roads in Poland that were "passable at all times for motor vehicles." For several days after rains in April, the official Tourist Bureau in Krakow advised against attempting any of the main routes west to Upper Silesia.

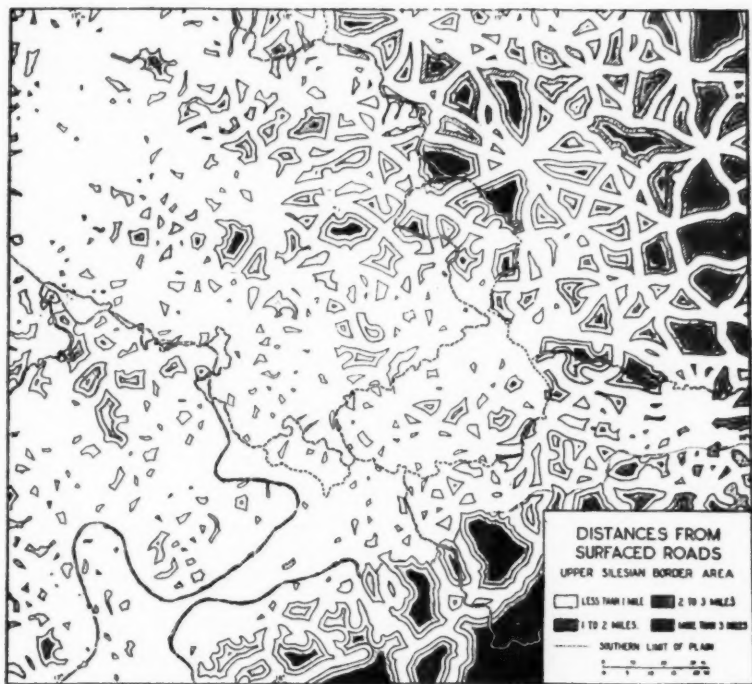


FIG. 4.—Distances from Surfaced Roads (anything other than unimproved dirt roads)

as shown on the maps of Polish geographers.¹⁰ Livestock are notably less in importance—the boundary shown on Finch & Baker's map of swine¹¹ remains clearly marked today, though the political basis for it has been removed.

Farmyards and farm buildings reflect likewise the more primitive stage (Plates C and D). In contrast to the predominating brick or stone houses west of this line are the frame and rough-

¹⁰Ornicki, Wiktor: "Mapa intensywności gospodarki rolnej w Polsce, 1924/5" (La carte d'intensité de la production agricole en Pologne), in *Wiadomości Geograficznych* R. 1929, Nr. 4; "Produktywność rolna w Polsce, 1924/5" (Die Agrarproduktivität in Polen, in the same, 1920 Nr. 1; Romer: *Atlas of Poland*, 1916.

¹¹Finch, V. C. & Baker, O. E.: *Geography of World Agriculture*, p. 133. (Washington, 1917).

hewn log huts, commonly with thatched roofs, that predominate east of this cultural divide.¹²

Similar differences are seen in the towns. One is impressed, as was De Martonne,¹³ by the frequent lack of sidewalks, by dwellings which would not be tolerated west of the divide, the workers' barracks with bare dirt between them, and by the incompleteness of water and sewerage systems, developed only since the war, even in larger centers (Plates E and F). In general all parts of the industrial towns look like the worst parts of those west of the former German frontier.

The total impression of all these differences is such that anyone travelling ten miles across this cultural landscape boundary between Silesia and old Poland, feels that he has travelled farther than from Chicago to Silesia.

HUMAN BOUNDARIES

The boundaries of the different population groups of the region—Germans, Poles, Czechs, Slovaks—have little manifestation in the landscape; are, if you like, non-geographic (though some students include these also in "natural boundaries"). Even the language seen on the street signs, in the railroad stations, and in other public places, reflects in many cases not the language of the inhabitants but merely the official language of the state. Nevertheless in studying a boundary problem the geographer must not ignore these factors since they may, as in this case, constitute the very cause of the problem.

Race, in the strict anthropological sense, has in this district, as in general in Europe, no geographical, and perhaps no cultural significance. Teutonic and Slavic stocks are hopelessly intermixed with no more correlation with present language or nationality groups than blondes and brunettes in England. All the differences in the population that are of significance for the border study are of cultural, not of biological origin.¹⁴

¹²A map drawn by Ormicki shows 75-95% masonry buildings in Polish Upper Silesia, and 50-95% wooden buildings in the areas north and east. Ormicki, Wiktor: "Zewnętrzne oblicze wsi polskiej (Physiognomie des polnischen Dorfes)," in *Wiadomości Geograficzne*, R. 1929, Nr. VI i VII. Krakow.

¹³De Martonne, Emm.: *Europe Centrale*, 2ème Partie, (Tome IV de la *Géographie Universelle*), pp. 651-5.

¹⁴Even the names of individuals, whatever they may mean historically, are no sure indication of present nationality. Thus, of those referred to here, Uhlitz and Lukasek are the names of important German leaders, Romer that of the patriotic Polish geographer.

The important boundaries in this area are those of language, of folk (*Volk*, as the Germans say) as distinct from language, of religion, and of nationality, the last being in large part a product of the others. The religious boundary, elsewhere on the German-

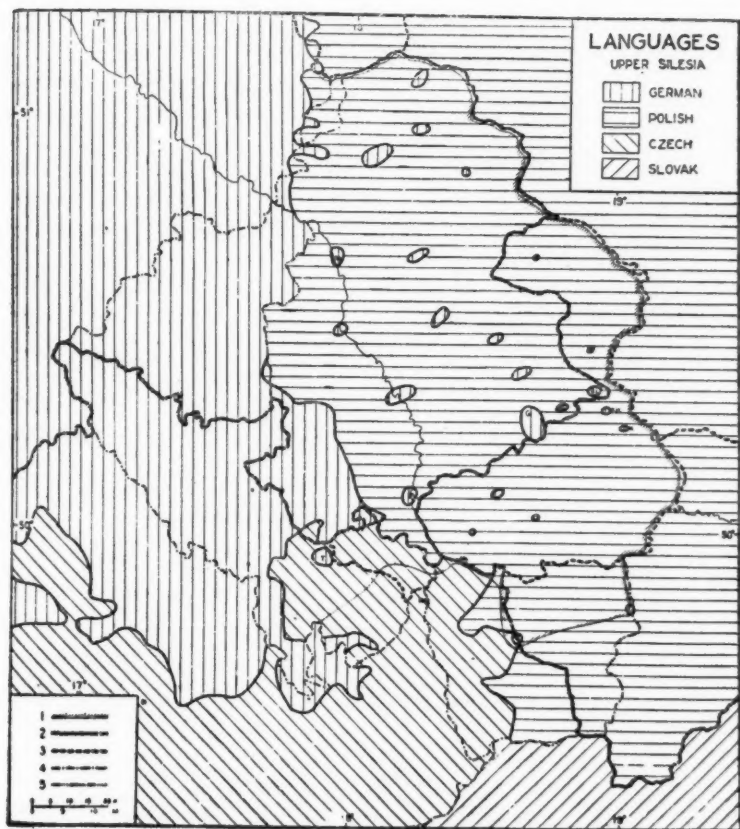


FIG. 5.—Languages in the Upper Silesian Area

Symbols:

1. Eastern and southern limit of area in which cities have, or had until recently, German majorities, in rural areas of Polish or Czech majorities
2. Present international boundary
3. Former international boundary
4. Provincial boundaries
5. Western boundary of the plebiscite area

Polish border zone so important, is hardly found here, as almost the entire area, regardless of nationality, is strongly Roman Catholic.¹⁵

In Upper Silesia, as generally in Eastern Europe, the language boundary is exceedingly difficult to draw (Fig. 5). Except for the definitely German county of Leobschütz and the district of Moravian dialect in Hultchini, the entire plebiscite area of 1921 was a region of two languages, with predominately Polish or predominately German communities close together, and with many people using both languages.¹⁶ Before the division German predominated in the middle-class urban centers, Polish in the poorer workers' districts, in the coal-mining towns, and for the most part in the poorer farming areas. In total, the overwhelming majority are the descendants of Polish-speaking peasants native in the area, and retain a Polish dialect as their native tongue.¹⁷ The German population did not originate from political colonization¹⁸ but rather: first, in small part from centuries-old settlements of Middle German farmers who maintained their language and culture in the midst of the Poles; second, from the middle-class urban population who migrated from other parts of Germany into the growing cities during the past century and a half, and finally, not least, from the voluntary Germanization of thousands of Polish workers who, in moving from the country to the industrial cities,

¹⁵Only the county (*Kreis*) of Kreuzburg has a Protestant majority, practically all the remainder of Upper Silesia is over 90% Roman Catholic. *Atlas von Schlesien*, *op. cit.*

¹⁶The conclusions for the former German area are based largely on the Prussian Census for 1910 (and previous years) and the census of school-children in 1915. Too much doubt has been cast on the validity of post-war censuses of languages on either side of the new boundary to permit using them. The German-Polish language boundary on the map is based largely on Weber, Paul: *Die Polen in Oberschlesien* (Berlin, 1913) and Partsch, *op. cit.*; both the work of German scholars accepted and used by Polish propagandists. See Weinstein, J.: *Upper Silesia, the land of contrasts*. (Paris, 1931). Also published in French and German.

¹⁷That the great increase in population of the past century was not the result of immigration was shown by M. Vogt. See Volz, W.: *Die wirtschaftsgeographische Grundlage der oberschlesischen Frage*. (Breslau, 1921), pp. 48-54. Also published in French, English, and Italian.

¹⁸Frederick the Great did found German, as well as Polish, settlements to develop Upper Silesia economically, but most of the German settlements became Polonized, adding to the original Polish population. Zimmermann, A. W.: *Beitrag zur Beschreibung von Schlesien*. (Brieg, 1783).

took on German language along with city ways. The latter tendency was so marked as to warrant the conclusion in 1915, that the industrial district itself would within one or two decades show a German majority.¹⁹

The Czechish-German boundary lies for the most part well within Czecho-Slovakia so that the western part of the province of Silesia in that country is almost solidly German in language.²⁰ Where the linguistic line crossed north of the pre-war boundary, in the Hultchini district, the political boundary was changed, in the Treaty of Versailles, to conform roughly to it—though without consulting the wishes of the inhabitants, later shown to be opposed to the change.²¹ But where the language line lies south of the political line, in the Sudetes, no such changes were considered.

In Teschen Silesia there is considerable mixture of Polish and Czechish speaking peoples. The new state boundary dividing the area between Czecho-Slovakia and Poland was drawn somewhat east of the language divide. Most extraordinary is the case of the city of Teschen, where all three language groups are present, the German predominating, and which has been split between Poland and Czecho-Slovakia.

The Polish spoken in Silesia differs greatly from standard Polish, as would be expected in an area separated from Poland for over seven centuries and ruled by peoples of different tongues. Some Moravian and many German words are used with Polish endings, and many old Polish words are found which are obsolete elsewhere (cf. Canadian French). But careful students, including Germans, agree that the difference between this so-called "Wasser-polnisch" and standard Polish is no greater than that between Bavarian and High German.²² The important point is that when the Silesian

¹⁹Weber, *op. cit.*, pp. 50-54.

²⁰Czecho-Slovakian Census of 1921, reproduced in, Oberschall, A.: *Die Nationalitätenfrage in der Tschechoslowakei*. (Reichenberg, 1927).

²¹In a plebiscite held voluntarily under local auspices, 93.7% of the adult population, it is claimed, voted to remain with Germany. Bollacher, E.: *Das Hultschiner Landchen in Versailler Friedensvertrag*. (Stuttgart, 1930).

²²That "Wasser-Polnisch" is not Polish but only a corrupt German with Polish endings is a major element in German propaganda for Upper Silesia. Actually the term is used loosely to cover a wide range of language mixtures so that in certain districts west of the Oder it is perhaps more German than Polish, but on the other hand in Teschen Silesia is Polish mixed with considerable Moravian, but little or no German. The author's conclusion that it must, on the whole,

Pole speaks his dialect, Poles from the outside can, with some difficulty, understand and speak with him, Germans cannot. The essential community of language must therefore be recognized as one major factor connecting most of the population of the region with Poland.

On the other hand in such elements of social culture of the whole population (as distinct from individuals) as education, social character and standards, living conditions, etc., there is a marked cleavage between the Silesian Poles and those of Galicia and former Russian Poland. The pre-war frontier remains as the boundary between the area of nearly universal education and that of high illiteracy,²³ between the countries in which cleanliness is considered essential and those where dirt and insects are easily accepted, between the areas where social welfare is an important function of the state and those where beggary is a regular profession. It is also the western boundary of the area in which the large Jewish population represents a separate folk or even nationality, speaking their own language, Yiddish, wearing distinctive costumes, and living apart from the rest of the population.

All these differences, some of which are manifested in the cultural landscape as previously noted, are well recognized by the inhabitants on both sides of the cultural divide. They constitute a main reason for the fight of Polish Upper Silesia (Slask), including the Poles, to maintain autonomy within Poland. Certainly in many such ways, including the background of literature and art within the area, it can with some reason be maintained that Upper Silesia, though Polish in language, is German in culture. German writers commonly assume that this is the result of the many centuries of partial connection with the ancient German

be counted as a Polish dialect is based on the statements of Germans native to the area, as well as the following sources:

Vogel, Rudolf: *Deutsche Presse und Propaganda des Abstimmungskampfes in Oberschlesien*, (Beuthen, 1931), p. 14.

T-S: "Zur oberschlesischer unterrichtsfrage," in *Schles. Prov. Blätter*, 1872, pp. 500-1.

"Entgegnung des 'Towarzystwo Oswiaty na Slasku imienia sw. Jacka' auf die Ausführungen des Herrn Kultusministers Dr. Schmidt betreffend das sog. Wasserpolnisch in Oberschlesien," in *Katolik* (Beuthen, O. S.), Mar. 1918.

²³Romer, Eugenvisz: *Geog-statist. Atlas Polski* (Atlas de la Pologne) (Warsaw and Krakow, 1916).

empire, but comparison with other sections along the former Polish-German border of more recent date, and the descriptions of Upper Silesia when taken over by Prussia from Austria, indicate that the present differences are largely the result of the century and a half of Prussian rule.²⁴

Most difficult of the human boundaries to determine is that of nationality. No country of Central Europe has made a reliable count of its nationalities.²⁵ Some indication is given by minority party votes at parliamentary elections,²⁶ but several of the post-war plebiscites showed that such votes were not trustworthy. Personal observations must be ruled out, both as inadequate and as unreliable. In Upper Silesia there is the official record of the national views of the inhabitants recorded in the plebiscite of March 21, 1921.²⁷ The reliability of that vote has been disputed from both sides because of the undeniable pressure brought to bear on the voters by landlords, employers, priests, officials, and terroristic bands. Nevertheless the fact that over 90% of those eligible to vote actually cast their votes in what was generally admitted to have been a peaceful and secret vote, honestly counted, appears to justify accepting the results as fairly representative of what the population felt at the time. Particularly significant is the fact that, in addition to practically the entire German-speaking population, a large proportion, perhaps 40%, of those speaking Polish likewise professed German nationality²⁸ as many even in the now Polish part still do. Geographically the results of the plebiscite were so confused as to make it impossible to draw a definite nationality boundary (Fig. 6). Simplifying the map on the basis of combining districts with important geographic connections brings out two boundaries (Fig. 7). West of one of these, German nationality clearly predominates, east of the other, Polish. But between them is a large rural area with a small Polish majority, and the all-important industrial district practically sur-

²⁴Zimmermann, A. W.: *Beiträge zur Beschreibung von Schlesien*, (Brieg, 1783), Bd. 2, pp. 200ff.

²⁵The census of native language (Muttersprache) is frequently miscalled a census of nationalities.

²⁶The Polish party was listed in Upper Silesia first in the election of 1893. It reached its highest percentage of votes in 1907 with 39.4%, in the last pre-war election, 1912, was 30.7%.

²⁷"Resultats numeriques du plébiscite," *Journal Officiel de Haute-Silésie*, Oppeln, May 7, 1921. *Commis. interalliée de Gouv. et de Pléb.*

²⁸Volz, Wilhelm: *op. cit.*, pp. 56-76.

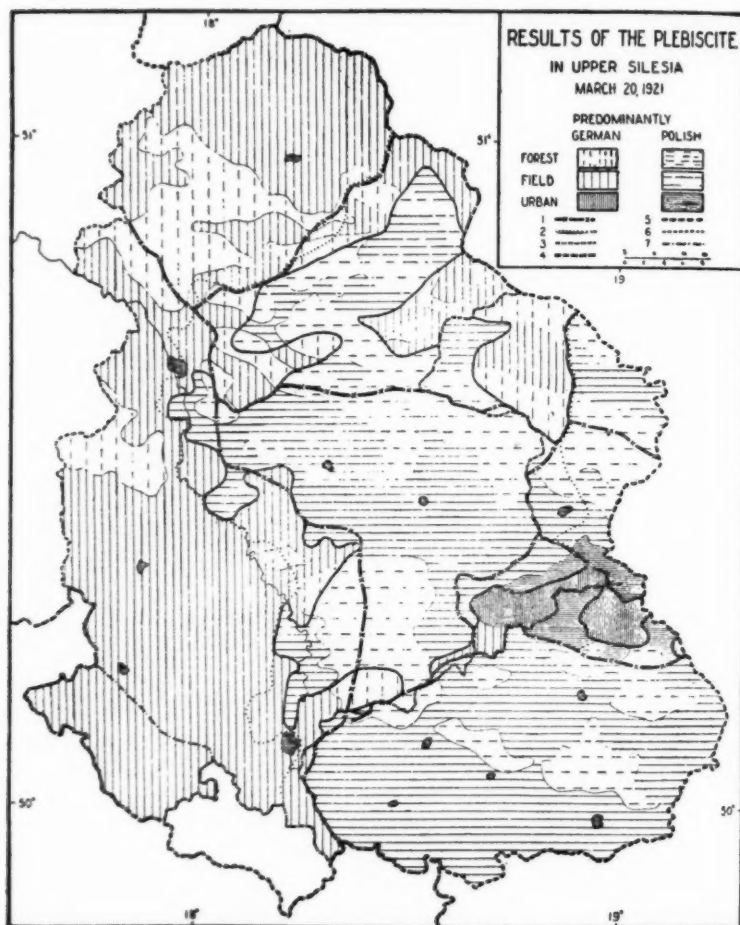


FIG. 6.—Results of the Plebiscite in Upper Silesia, March 20, 1921

Symbols:

1. Limits of the main geographic districts (Fig. 7)
2. Eastern limit of area in which every community of more than 100 voters showed a marked German majority, and western limit of similar Polish area
3. International boundary ultimately drawn
4. International boundary unchanged
5. Former international boundary
6. Western boundary of plebiscite area
7. Northern boundary of district to be given to Czecho-Slovakia if cut off from Germany

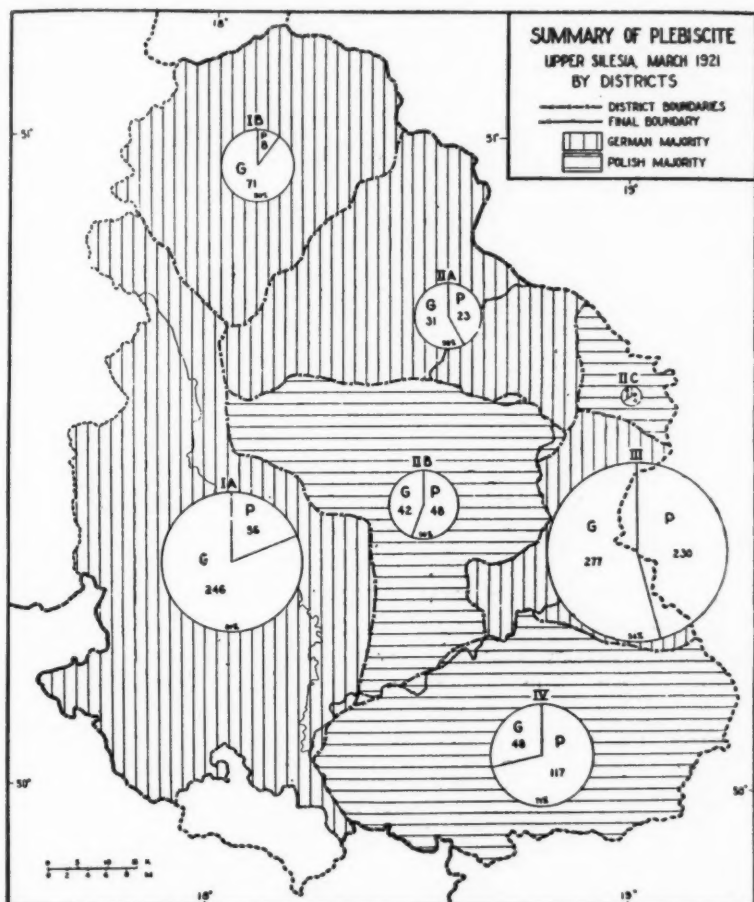


FIG. 7.—Summary of the March Plebiscite in Upper Silesia, by Districts. Figures in circles represent thousands of voters, and percentage total for the majority. The size of the circles is proportionate to the total number of voters in each district. Note the strong German majorities in districts IA and IB, the strong Polish majorities in districts IV and IIC, the slight majorities for one side or the other in districts IIA, IIB, and III.

rounded by Polish areas, but with a definite German majority (54%).

The actual boundary finally determined, by recommendation of the Council of the League of Nations, compromised by splitting

the industrial district, although it was not possible to do so without having a slight German majority in the portion of that district awarded to Poland.²⁹ The central rural area of small Polish majority was of necessity then left to Germany. Another rural district, around Lublinitz, with a slight German majority, was however, quite unnecessarily awarded to Poland. The new political boundary could not therefore be claimed to conform to a nationality boundary.

Since the partition there has been considerable change, both in sentiment and in shift of population.³⁰ The study of the minority movement of each side indicates, I think, that no district including both town and country on either side of the line could now show a majority vote for the foreign nationality. In other words, the new political boundary has perhaps forced the nationality boundary to conform to it.³¹

BOUNDARIES OF AREAS ASSOCIATED BY TRADE

In determining political boundaries it is obviously desirable, in addition to maintaining the unity of regions of similar character to associate together so far as practicable, regions having important economic interrelations. Thus more significant than the landscape boundary between the plain of Silesia and the Sudetes hill and mountain region would be, according to some students, an "organic" or "harmonic" boundary (also held to be a type

²⁹Defined in *Minutes of the Special Session of the Council of the League of Nations devoted to the Question of Upper Silesia*, Aug. 8, Oct. 12, 1921. For the procedure and principles used to arrive at this decision see Bourgeois, Leon: *L'œuvre de la Société des Nations, 1920-23*, pp. 247-78.

³⁰The declining interest of the Polish minority in German Upper Silesia is shown by the decrease in votes for the Polish party from over 30% to less than 10%, and by the complaints of the Polish paper *Katolik* (Beuthen, O. S.), quoted in Kuester, Rudolf: *Die polnische Irredenta in Westoberschlesien* (Berlin, 1931). For the situation in Polish Upper Silesia see Ulitz, Otto: in *Das Deutschtum in Polnisch Schlesien*, Plauen i. Vogtl. and Katowice, 1923, p. 251. The political changes in Germany in the past year have unquestionably lessened the number of adherents to German nationality in Polish Upper Silesia.

³¹Changed political or economic conditions might change this conclusion completely. A considerable percentage of the population is not as strongly minded nationally as socially and economically, so that assurance of much better economic conditions in one country might swing a vote to that country. But the results of every free election (in Poland until 1930, in Germany until 1933) indicate that the minority on each side is, in fact, a minority.

of natural boundary) which would include a major portion of the highland area with the plain.³²

Likewise it is claimed the industrial district should be included with the country with which it was organically developed on the basis of sources of capital, technical equipment and management, and which provided, in comparison with the present Poland, the greater markets for the coal, iron, and zinc.

TABLE. PRE-WAR SHIPMENTS FROM UPPER SILESIA³³

Areas	Percentage of Total Shipments		
	Coal	Iron and Steel	Zinc
Germany (present boundaries).....	39	65	perhaps 90
Poland (present boundaries).....	25	13	less than 10
Inland exports, south or southeast..	36	12	not known
Overseas exports	—	11	—

A more significant conclusion, attested by the economic difficulties of this district both before and since the war, is that no boundary which excludes any of the surrounding territories from the market area of Upper Silesia—which any international boundary under present conditions would do—can be called an “organic boundary.”

Upper Silesia suffers from the fact that it has politically a peripheral location with respect to each of the states concerned, but in consequence of its mineral deposits in the interior of the continent, it has an industrial development, a density of population, and an economic and strategic importance which can best be associated with a politically central location.

LOCAL ASSOCIATIONS WITHIN THE AREA

The more immediate local associations of different localities and districts within the border area was studied from several different angles. An attempt was made to find trade divides based largely on the road and railroad patterns (Fig. 8). *Natural barriers* to trade,³⁴ such as that found farther east in the High

³²Geisler, W.: *Schlesien als Raumorganismus*. (Breslau, 1932). For a discussion of these terms as used by Sieger, Penck, and Vogel, see Sölch, *op. cit.*, pp. 35-46.

³³Glück Auf, Oct. 1925, pp. 13, 140; Kramsztyk, G.: *Upper Silesia in economic relation to Poland and Germany*. Similar proportions for the years 1908-11 are given in Kulmütz, P. H.: *Das Absatzgebiet der schlesischen Kohle* (in *Probleme der Weltwirtschaft*), (Jena, 1914), p. 10.

³⁴Sölch includes these with natural defense barriers under the term “Natur-schranken” or “schränkentreue Staatsgrenzen.”

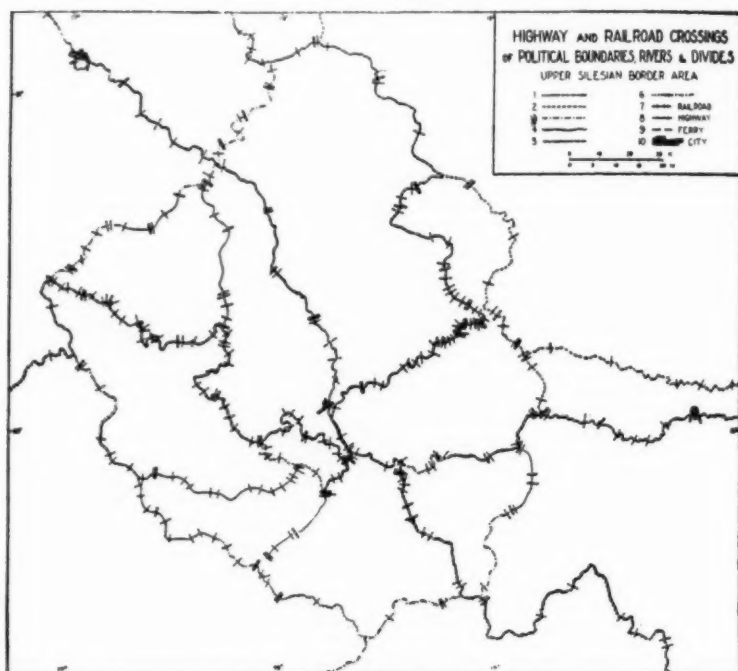


FIG. 8.—Highway and Railroad Crossings of Political Boundaries, Rivers, and Divides

Symbols:

1. Present international boundary
2. Former international boundary
3. Provincial boundaries
4. Larger rivers (Oder and Vistula only)
5. Trade divide cutting the least number of routes
6. Watershed
7. Single- or double-track railroad, as indicated

Tatra separating Slovakia from Galicia, are not to be found within this area, since roads and railroads find no impassable obstacles. Nevertheless natural *communication divides* of a lesser degree of effectiveness are to be noted.²⁵ Thus the crest-lines of

²⁵Judged by the numbers of crossings, rivers such as the Oder appear to be a form of such natural communication divides, as in a limited and very local sense they are. But the crossing points, unlike those over hill crests or political divides, are each centers of concentration of many routes from both sides, in several cases constitute important trade centers whose tributary area is always on both sides of the river. In addition, of course, the important river traffic (below Cosel) is of mutual interest to both banks.

the Sudetes, the Beskides, and the Tatra, coinciding for the most part with the watershed between the streams of the northern plain and those of the Danube Basin, appear as well-marked, though not complete, trade divides. But where the low mountains break down in the Jesinky (Gesenke) and disappear entirely in the Moravian Gate no such divide is found. On the plain the original poverty of Upper Silesia east of the Oder, together with the mere factor of distance, led early to the development of all of eastern Upper Silesia as a dividing zone between the areas influenced from Breslau on the one hand or Krakow on the other. The modern development, particularly in the industrial area, has tended to break down the separating force of this zone, but a strong remnant remains following the pre-war frontier.

This former Polish frontier, one of the oldest boundaries in Europe, is still one of the strongest divides on the map. Fewer roads and railroads cross it than almost any other divide in this part of Europe, outside of the high mountains. This is true not merely in respect to the number of roads and railroads crossing the line, even to-day, but also in the amount of traffic on them. The force of long established connections, together with the influence of the marked social differences already noted on either side of this line are stronger than the newer forces for national economic unity. Somewhat similar is the case of the former Russian-Austrian frontier, so that two of the strongest divides on the map (Fig. 8), which may be called "antecedent boundaries," are no longer used for international frontiers, but are included within the territory of Poland.

Far less effective is the boundary which formerly divided Silesia between Prussia and Austria, now the frontier of Germany and Czecho-Slovakia. This is a "subsequent boundary" drawn less than two hundred years ago as a compromise between the sword of Frederick the Great and the diplomacy of Maria Theresa, passing through previously developed and united areas. Probably few boundaries in Europe show as little relation to the road pattern. Local trade areas of principal centers are artificially limited and farmers forced to trade in more remote towns; highways in several places are cut by salients of the other country; even villages are cut in two. (Compare this line on Figure 9 with the road divide drawn southwest of it, notably in the western part of the area, centering on Freiwaldau, indicated by "F.")

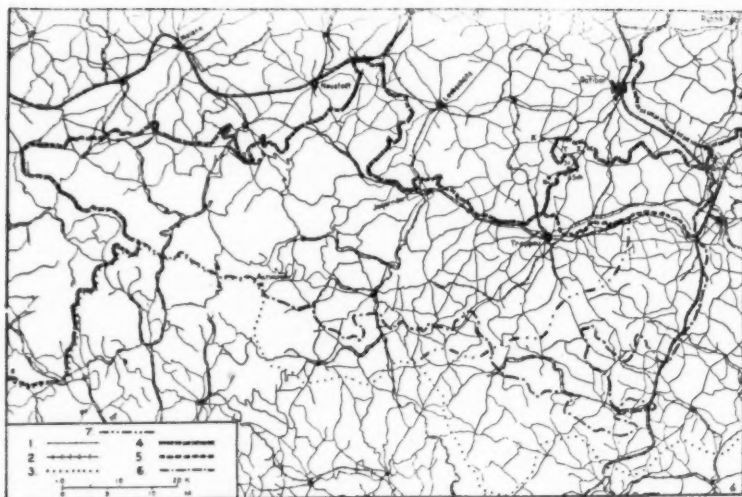


FIG. 9.—Local Trade Routes in Relation to the Czecho-Slovakian Boundaries in Silesia

Symbols:

1. Highways
2. Railroads
3. Watershed
4. Present international boundary
5. Former international boundary
6. Provincial boundaries
7. Local trade divide

This boundary was changed by the peace treaties in two places. For linguistic reasons the Hultchini district was separated from Germany and added to Czecho-Slovakia. This improved the situation of Troppau and Ostrava but at the expense of Ratibor (which was likewise damaged by the new Polish boundary on its other side). Unfortunate was the additional salient in the boundary seriously interfering with the shortest trade routes from several small villages to the market center of Ratibor.³⁶ The conflict

³⁶From Steuberwitz and Rössnitz in Germany the short route to Ratibor through Zauditz, now in Czecho-Slovakia, is still used in spite of the handicap and occasional complications resulting from passing through customs stations twice each way. The inclusion of this salient with the Hultchini area was apparently an accident of the boundary definition in the Versailles Treaty, as the two villages included in it are claimed to be German in language in contrast to the Moravian dialect used in the rest of the district.

between Poland and Czecho-Slovakia over Teschen Silesia resulted in dividing that area and splitting the town of Teschen in two along the small river flowing through it.

Although the road pattern appears largely unaffected by the boundary, the traffic of course is greatly hindered by the tariff walls, customs and pass stations. The change since the war at the former Austrian stations from German-speaking officials to Czechish has intensified the hindrances by introducing a narrow language barrier where, for the most part, none existed before.

Along the new German-Polish frontier there are, to be sure, few such extreme instances, but the actual disruption is far greater because of the importance of the industrial district through which the line passes (Fig. 10 and Plate G). In its curious doubled

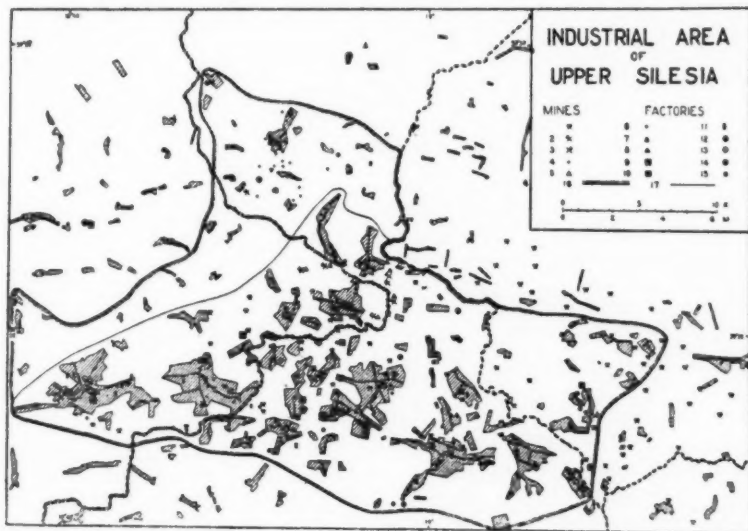


FIG. 10.—The Industrial Area of Upper Silesia

Symbols:

- | | |
|-----------------------------|---|
| 1. Coal mine | 10. Steel mill |
| 2. Zinc mine | 11. Iron or steel fabricating plant |
| 3. Lead mine | 12. Electric power plant |
| 4. Iron mine (very small) | 13. Chemical industry |
| 5. Zinc washery | 14. Main water pumping station (wells) |
| 6. Coke oven | 15. Other industrial plant |
| 7. Zinc roaster and furnace | 16. Boundary of total industrial district |
| 8. Zinc rolling mill | 17. Boundary of inner industrial district |
| 9. Blast furnace | |

course through this district the boundary crosses surely more lines of transportation than any other equal stretch of international boundary in the world (Fig. 11). Although a few of those shown

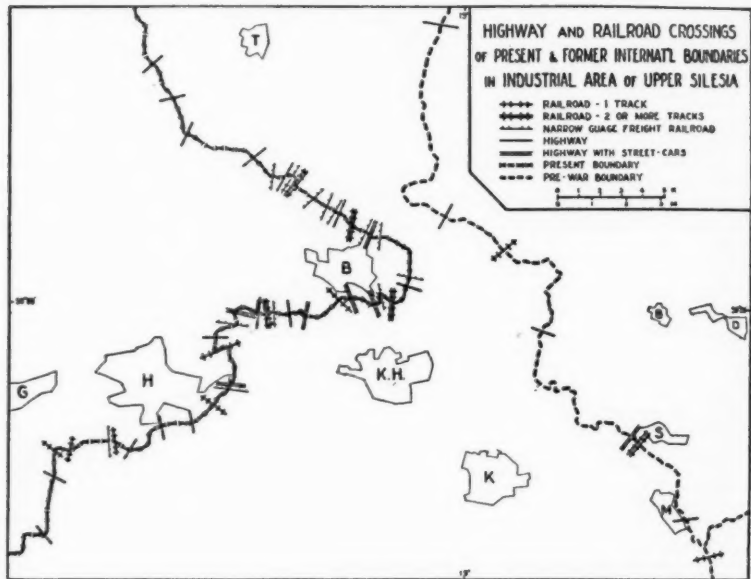


FIG. 11.—Highway and Railroad Crossings of Present and Former International Boundaries in the Industrial District of Upper Silesia.

on the map—one railroad and six or seven roads—have been closed, the general pattern remains unchanged and the traffic, on the roads at least, although certainly less than before, is vastly greater than that passing even now across the abandoned, antecedent boundary.

In addition to the dense network of roads and railroads the economic unity of the industrial triangle in the formerly German area was strengthened by a narrow-gauge freight line connecting the mines and factories, an interurban electric system, electric power systems, and water supply systems covering, in each case, almost the entire district (Figs. 12 and 13). All of these were inevitably seriously affected by the new boundary cutting across them, breaking the street-car lines at five points, each of the other systems at about a dozen points. In each case the separate parts

have been reorganized on either side of the line and many of the connections permanently broken, but a large measure of connection and interrelation still remains, particularly across the peninsula of German territory at Beuthen. On the other hand, of all these systems only one has developed any connections across the old frontier, the interurban line to Sosnowiec and the Dombrowa area (Fig. 11).

Unique is the relation of the new boundary to the mining operations (Figs. 14 and 15). Property lines in this area are independent at three different levels: on the surface, in the overlying zinc-lead formations, and in the lower coal measures. In consequence it was impossible to avoid cutting many mining properties by the new boundary. Many workings have been definitely closed at the line, except for vital water and air connections; in nine coal mines and four zinc-lead mines mining has continued across the line underground, under special agreement, terminating in

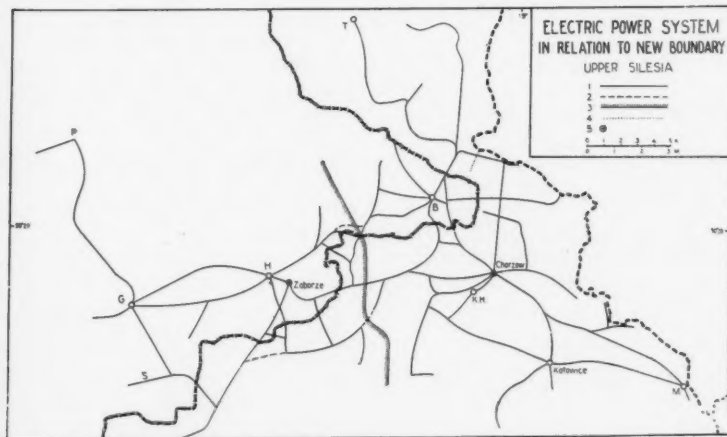


FIG. 12.—The Electric Power System of Upper Silesia in Relation to the New International Boundary.

Symbols:

1. Former power lines
2. New lines made necessary by the boundary changes
3. Former division between areas served from Zaborze and Chorzow power stations
4. Eastern limit of the Polish area receiving its power from Chorzow but across the Beuthen (B on the map) salient
5. Power station

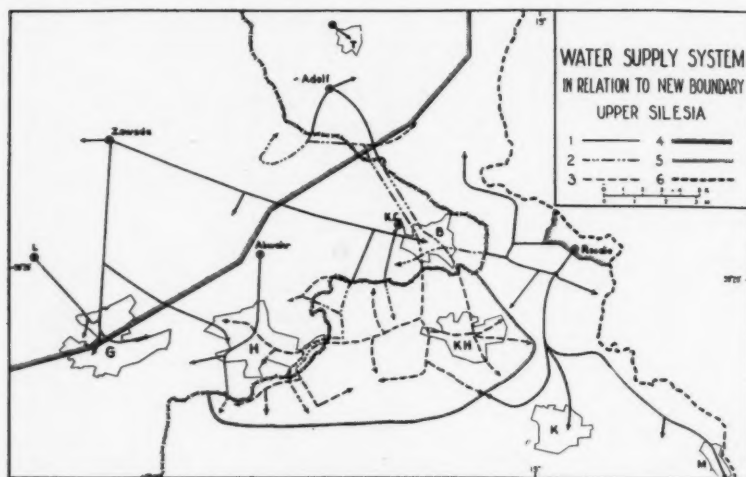


FIG. 13.—Water Supply in Relation to the New Boundary

Symbols:

1. Water mains carrying water that has not crossed the boundary
2. Mains receiving (in 1922) water from sources in the other country
3. Mains receiving water from sources in the same country, but brought across territory belonging to the other country
4. Southern limits of areas reserved from mining in order to protect the water supply
5. Eastern and southern limit of Polish area still receiving water through mains crossing Germany at Beuthen (B on the map)
6. Former international boundary

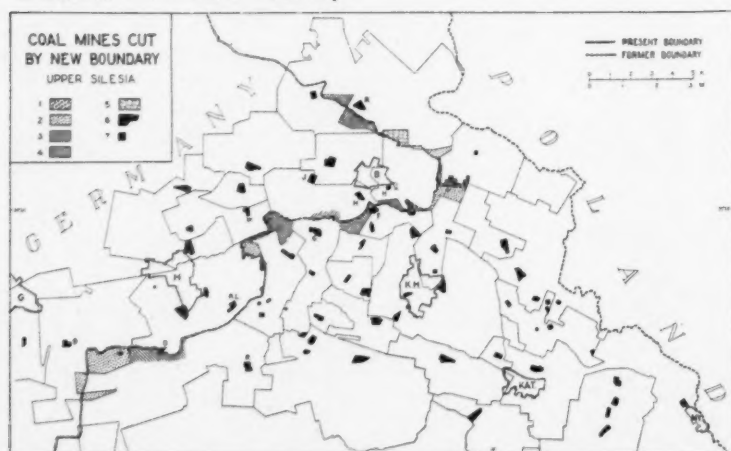


FIG. 14.—Coal Mines Cut by the New Boundary

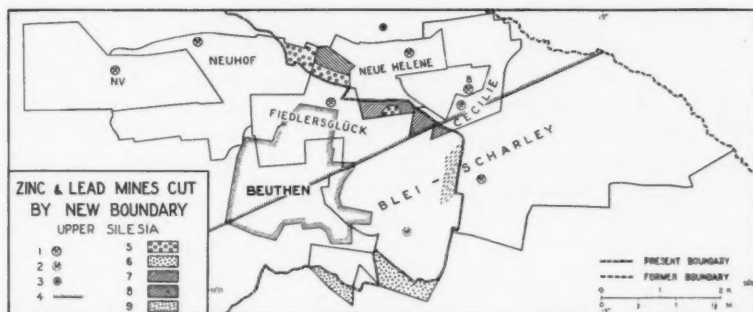


FIG. 15.—Zinc and Lead Mines Cut by the New Boundary

Symbols:

1. Zinc-lead mine, main shaft
2. New zinc-lead mine resulting from boundary change
3. Main water shaft pumping water that formerly drained underground from mines on both sides of the boundary
4. Southern limit of area in which all lead produced is the property of the Prussian (or now Polish) state
5. Unworkable because of important surface features, or already worked out when boundary was drawn
6. Not yet reached by underground workings
7. Mining operations on the German side from a mine in Poland
8. Mining operations on the Polish side from a mine in Germany
9. Mining operations formerly carried on across the boundary, but discontinued after construction of a new mine

1937; and two new mines, one coal and one zinc mine, though economically quite superfluous, have been constructed at a cost of several million dollars, in order that important coal and zinc deposits might be retained for Germany.

The mines and factories in the former German industrial district were closely tied together in major units, both vertically and horizontally, throughout the entire district, while there was almost

Symbols for Figure 14:

1. Unworkable because of important surface features
2. Not yet reached by underground working; will presumably be sold or exchanged
3. Mining operations in Germany from mine in Poland
4. Mining operations in Poland from mine in Germany
5. Operations planned for the near future
6. Main shaft
7. New mine constructed because of alteration in boundary

no connection with those in the Dombrowa and Krakow districts across the old border. In the iron and steel industry adjustments to the new boundary have led to almost complete separation, in operations as well as ownership, of the plants on the now Polish side from those on the German side, but little or no connections have been made with individual plants across the former international, now merely provincial boundary. In the zinc industry, however, the fact that all the furnaces happen to be on the Polish side while some of the mines, washeries, and rolling mills, and nearly all of the markets, are located in Germany has caused this industry, even though divided corporately, to continue the movement of commodities back and forth across the new boundary (Fig. 16).

For the individual inhabitants of this almost continuous urban district countless connections have been disrupted. Thousands of workers in mines and factories became foreigners with no rights of citizenship in the places of their work, and obliged to pass border inspection daily on their way to and from their homes (Plate H). Thousands of related families living in neighboring towns, or in town and country, found themselves likewise separated from each other by the restrictions of the new boundary. The children of two such families are more or less forced to receive education in different languages, and taught to hate or despise each other's country.

The conclusion with reference to local associations is obvious. The former frontier, as an antecedent boundary, conformed to an extraordinarily strong and clearly marked divide, which has been but little altered after ten years; the new subsequent boundary was drawn across a great complex of intimate associations, many of which still remain. The old line separated locally, districts and peoples who were in many, though *not all*, important respects different from each other, whereas the new line through the industrial district conformed to no geographical or human boundaries. The force of this boundary, as built up by the tariff wall, by passport and other governmental restrictions, make it, in spite of the ameliorations of the Geneva Treaty, extraordinarily disruptive to local associations. With the termination of that agreement in 1937, the boundary will presumably be greatly strengthened as a barrier.

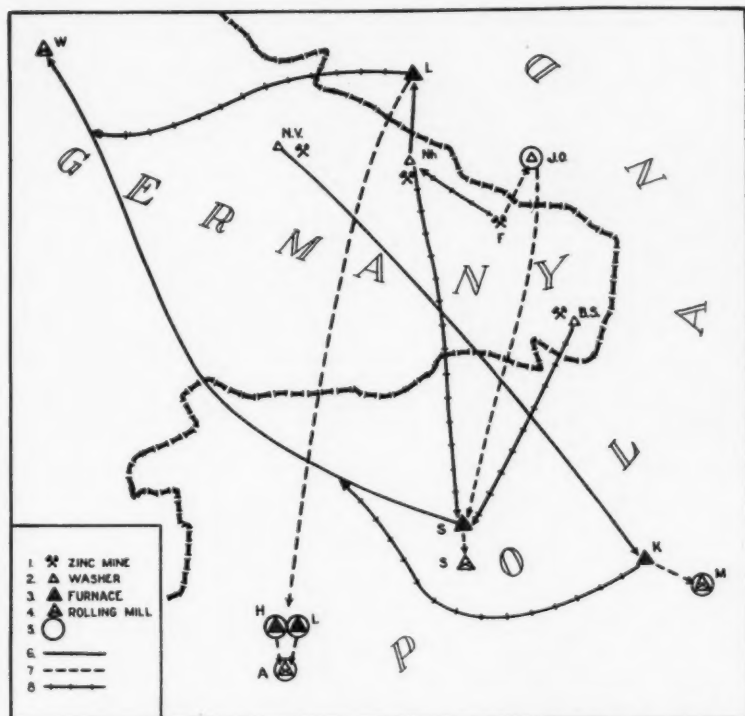


FIG. 16.—Diagram of Operating Connections Across the New Boundary of One of the Principal Zinc Companies (not exact as to scale).

Symbols:

- 1-4 as indicated on the diagram
 - 5. Abandoned, in whole or in part because of boundary change
 - 6. Movement of commodities little changed
 - 7. Movement discontinued because of new boundary
 - 8. New movement resulting from the boundary
 - W. Several rolling mills in Germany, considerably west of this area
 - B. S. The new Blei-Scharley mine built because of the new boundary
- Recent consolidation of the Neue Victoria washery with the Neuhoof washery is omitted to avoid confusion

CONCLUSION

Upper Silesia, to summarize, is a border area in which the various geographic and human boundaries significant to states, instead of converging closely, diverge over a wide marginal zone which includes within it a major industrial district of dense popu-

lation. The political boundaries, representing diplomatic compromises, add to the confusion, geographically, by neglecting for the most part any one geographic boundary, and thereby developing a new one, and, in particular, by cutting through the very type of cultural landscape least suitable for boundary location.



PLATE A.—The Oder River a few miles above Ratibor where the new German-Polish boundary follows it. A "naturally marked boundary" but not an important "natural defense boundary."



PLATE B.—A "Green Boundary." The international boundary runs along the edge of the grain field; a boundary stone can be seen in the background at the left. The woman kept carefully on her (German) side of the line, but let her two cows crop the grass on the Polish side as well.



PLATE C.—A Russian Polish Farmyard, a few miles east of the former German boundary.



PLATE D.—Gallician Polish Farmhouses, a few miles east of the former German boundary.



PLATE E.—Workers Dwellings in the Dabrowa Industrial District, former Russian Poland.



PLATE F.—The Market Place of a Town in former Russian Poland.



PLATE G.—The New German-Polish boundary in the Industrial District. The line follows the small ditch, between the parallel freight railroads, between a mine and workers' houses, and is crossed by an electric power line.



PLATE H.—Workers going through pass inspection at a border gate on the new German-Polish boundary in the industrial district.

Ellen Churchill Semple

CHARLES C. COLBY

In 1897, with a modest article on "The Influence of the Appalachian Barrier Upon Colonial History," Ellen Churchill Semple made her initial contribution to American geography. In 1931, in her volume, "The Geography of the Mediterranean Region," she presented her last and greatest work. Between those years lie three and a half decades of distinguished service to geography. At the beginning of this period she was a young, untried, and unknown student but recently returned from study in a foreign university. At the end of that period she was one of the most widely known and most beloved personalities in American geography, and had become the greatest anthropogeographer in the world.

Ellen Churchill Semple came from a fine family and lived her girlhood in an atmosphere of wealth and refinement. She was born in 1863 in Louisville, Kentucky, during the stirring days of the Civil War. Her father, Andrew Bonner Semple (1805-1875), came to Louisville from Pittsburgh in 1835 in order to found a wholesale hardware business under the firm name of A. B. Semple & Bro.—later A. B. Semple & Sons. The business prospered and thus the family was able to give the children good schooling, an abundance of books, and a healthy, well-ordered life. Ellen Churchill was born relatively late in the married life of her parents, her father being 58 and her mother 41 when she was born. Her mother, Emerin Price (1822-1904), was an exceptionally gifted woman of rare charm. Of her, Miss Semple's brother, Frank J. Semple, writes, "It was her brilliant mind, her untiring energy and her ambition for her children that was reflected in Ellen's accomplishments." Ellen Churchill's father died when she was 12 years old and from that time her education was directed by her mother.

To the good health, good breeding, and cultivated bearing assured by her family and her girlhood surroundings, Miss Semple's years at Vassar College added vigorous training and stimulating experiences. By the seventies of last century Vassar College had attained a widespread reputation for the high quality



ELLEN CHURCHILL SEMPLE, 1863-1932

"Man is a product of the earth's surface. This means not merely that he is a child of the earth, dust of her dust; but that the earth has mothered him, fed him, set him tasks, directed his thoughts, confronted him with difficulties that have strengthened his body and sharpened his wits, given him his problems of navigation or irrigation, and at the same time whispered hints for their solution."

INFLUENCES OF GEOGRAPHIC ENVIRONMENT, PAGE 1.

"As the Tropics have been the cradle of humanity, the Temperate Zone has been the cradle and school of civilization. Here Nature has given much by withholding much. Here man found his birthright, the privilege of the struggle."

INFLUENCES OF GEOGRAPHIC ENVIRONMENT, PAGE 635.

of its work and its student body was drawn from many parts of the country and even to a small extent from other countries. As a result, Miss Semple came to know a cosmopolitan group of young women. This experience broadened her social horizon, while the training she received in the classics, in English composition, and in history gave her habits of work which subsequently proved invaluable. She took her bachelor's degree in 1882 at the age of nineteen and was the valedictorian as well as the youngest member of her class. After teaching in her sister's private school in Louisville for several years she returned to Vassar for her master's degree in 1891.

Of the period between her degrees at Vassar, not much is recorded in the numerous biographical publications in which Miss Semple is listed. The period is important, however, in its bearing on her subsequent career. It taught her, for example, that social life, while pleasant, did not and could not command her full and continued interest. She tried teaching for a time but soon learned that teaching alone was not sufficiently challenging for a mind as active as hers. During this period she was stimulated by close association with the professional and literary men and women who then were making history at Louisville. Frequent discussions with two widely read and cultivated lawyers and a brilliant Jewish Rabbi gave her an increasing interest in social problems and social distributions. She read sociology, economics and such fragments of geography as came to hand. Either in this reading or during the work for her master's degree at Vassar she came in contact with the writing of Friedrich Ratzel, whose brilliant work at Leipzig was attracting widespread interest. In the summer following the completion of her work for her master's degree, she went abroad with her mother and in England met a young American student who had studied with Ratzel and reported enthusiastically about his work. Instead, therefore, of returning to America with her family she went on to Leipzig to study with Ratzel. Women students at that time were almost unknown in German universities and Ratzel was more or less nonplussed at her presence. She persisted, however, and although she was not permitted to matriculate she heard Ratzel's lectures and attended his seminar.

Her work with Ratzel proved to be the turning point in her career. Contact with his masterly mind first quickened her interest and then brought the conviction that here was the point of

view, the discipline, for which she had been seeking. She remained in Leipzig for a year and a half, reading with new interest, studying with a new intensity. She returned to America for a time, but in 1895 again went to Leipzig for further work with Ratzel. This time she was welcomed as a fellow student in a chosen field. Of her high opinion of Ratzel and his work, all her American students are familiar. At the time of his death in 1904 she wrote,

"His great achievement was in anthropogeography, which he was the first to raise to the rank of a science . . . his name will always be associated with the science of anthropogeography, as Adam Smith's is with that of political economy."

If Ratzel raised anthropogeography to a science, Semple illuminated its pages with work which has high artistic values as well as sound scientific qualities. She gave the science, moreover, a needed content and effectively promoted its acceptance as a field of inquiry.

Upon her return to America, Miss Semple began active work in her chosen field. From the time of the appearance of her first article in 1897, her publications of important dimensions averaged more than one a year for the remainder of her life. Three of these were books of major significance. In the early period of her work she confined herself exclusively to articles for the standard geographical publications. The first six, in large measure, were based on secondary source materials and were notable mainly because they introduced the anthropogeographical method into the American journals and to American students. In these early contributions she gained surety in her discipline, greater facility in her writing, and contact with the American geographical audience. It remained, however, for her study of "The Anglo-Saxons of the Kentucky Mountains," published in the *Geographical Journal* in 1901, to establish her as an outstanding contributor to geography. In this study she demonstrated her ability to work effectively in the field. She went on horseback into the then little known and inaccessible area of Eastern Kentucky and brought out a study which takes high rank among the geographical articles in the English language. Probably this brief article has fired more American students to interest in geography than any other article ever written. The appearance of this study forecast in happy fashion the highly favorable reception accorded her first

book upon its publication in 1903. This volume, *American History and Its Geographic Conditions*, closed the first distinctive period of her productive work and established its author in a distinctive place in American geography. It was widely read and discussed and, like many other departures from traditional treatment, involved its author in several interesting and stimulating controversies with workers in other fields. The book won wide acceptance as a text in courses in the historical geography of the United States and still is in active use.

After the appearance of her first book Miss Semple's sphere of influence broadened notably. She had become a person of importance and was in demand. In 1906 Professor R. D. Salisbury invited Miss Semple to act as visiting lecturer for a quarter in the newly established department of geography at the University of Chicago. Miss Semple's work was enthusiastically received and she continued to lecture at Chicago practically every alternate year until 1924. Her work was particularly helpful in broadening the horizon and in firing the interest of graduate students launching into their geographical work. Many men and women now prominent in American geography recall Miss Semple's work as a milestone in their training.

During all these years, however, Miss Semple continued her research and writing and was loath to take much time from these activities. In the interval from 1904 to 1911 inclusive she published 11 articles and one book; this interval constituting the second period of her career. The articles included two notable studies based on field work in the Lower St. Lawrence area and three philosophical studies dealing with the inter-relation of geography and history. The period was climaxed by the appearance of *Influences of Geographic Environment* in 1911. This great volume had been undertaken originally at the instigation of Professor Ratzel, who, sometime before his death in 1904, asked Miss Semple to translate into English or to restate in English his great work *Anthropo-Geographie*. Miss Semple found this impracticable, however, because Professor Ratzel's German text does not lend itself to translation, because her work was carrying her beyond the scope of Ratzel's volume, and because she wished to eliminate the organic theory of state and society which permeates the *Anthropo-Geographie*. Following some preliminary study, therefore, Miss Semple decided to write in English a volume along the general lines of Ratzel's book, using the original as much or

as little as was found desirable. She set up a new organization, introduced the documentation which had been lacking in the original, added much evidence to support and clarify the original contentions, eliminated some sections and reduced the scale of others, added new chapters and new concepts based on her own research, and, in fact, produced a volume which, although it carries the spirit of the master, is in reality a new, larger and more authoritative work in the same general field. In this volume Miss Semple proved her command of and leadership in the philosophical aspects of anthropogeography, demonstrated the breadth of her scholarship, and produced a volume of enormous value to students of geography and of human affairs.

Following the exacting work on her second book, Miss Semple took a long-contemplated trip around the world. She visited Japan, China, the Philippines, Java and India and reaped great pleasure and profit from her experiences. Through a girlhood friend, Frances Little of *The Lady of the Decoration* fame, and two Japanese women who were her classmates at Vassar, she saw Japan under highly favorable circumstances. Of the latter, one had become the wife of an Admiral of the Japanese navy while the other, Princess Oyama, was the widow of a former head of the Japanese army. Through the influence of Princess Oyama, Miss Semple was shown official courtesies which greatly aided her investigation of Japanese conditions. The results of these special studies are embodied in two brilliant articles; the one dealing with Japanese agriculture, and the other with Japanese colonial methods. In the former she utilizes her amazing power of description in a highly effective portrayal of both the static and the dynamic aspects of landscape. This article later was translated into Japanese and published in a Japanese magazine.

The publication of *Influences of Geographic Environment* added materially to Miss Semple's reputation both at home and abroad. Evidence of this is found in an invitation to lecture in the summer term of Oxford University in England in 1912. Her work there was so well received that she was asked to return in the summer of 1914. Following her lectures at Oxford in 1912 she lectured before the Royal Geographical Society in London, there presenting for the first time the results of her study of Japanese agriculture. In November and December she appeared before the Royal Scottish Geographical Society in Edinburgh, Glasgow, Dundee, and Aberdeen.

Following her return from Europe Miss Semple lectured at Wellesley College in the academic year 1914-15 and at the University of Colorado in the summer of 1916. She enjoyed these experiences, for they brought her new contacts and gave her a necessary change of pace. The year 1915 is notable for it witnessed the appearance of her first article dealing with the Mediterranean. Just when she decided to write her book on the Mediterranean probably was not known even to herself, but certainly the appearance of this article shows that she was actively at work on the great project as early as 1915. Her interest in the area, however, was displayed much earlier, for in two of her early magazine articles she deals at some length with the maritime activities and territorial expansions of the Phoenicians, Greeks and other peoples of the ancient Mediterranean. From 1915 on, the Mediterranean claimed the major portion of her time and interest. She traveled widely in the area and worked in the great libraries of Rome, Paris and London gathering material for the volume. The work on this book constitutes the third period in her productive career.

Miss Semple's work, like that of most other scholars, was interrupted during the period of American participation in the World War. In the autumn of 1917 she gave a course of lectures on the geography of the Italian front to officers at Camp Zachary Taylor (Louisville, Ky.). From December 1917 to December 1918 she made special studies of the Mediterranean Region and Mesopotamia for the "Bureau of Inquiry for the Peace Terms Commission." Headquarters for this work were maintained in the building of the American Geographical Society on upper Broadway, New York. This close proximity to Columbia University made it practicable for her to lecture there during the summer session of the university in 1918. After the War she returned to her research and writing and in 1920, '22, '23, and '24 again taught at the University of Chicago.

In 1921 Miss Semple became professor of anthropogeography in the School of Geography then being established by President W. W. Atwood at Clark University. She continued as a member of that faculty until her death. Her professorship gave her a sense of academic attachment which she had come to prize. She quickly sensed the opportunities and the responsibilities of the new school and carried on her part of the program with great zest and high skill. She found much stimulation in the work of

and in discussions with her colleagues and had high praise for them and their work. She was given complete freedom as to what she taught and how much she taught. Commonly she offered her courses and worked in the seminar during the first semester and gave her attention to research and writing during the second half of the year. She taught only in the graduate school; regularly offering *Anthropogeography*, *The Geography of the Mediterranean*, and *The Geography of Europe*, and occasionally *Southeastern Asia* and *The History of Geography*. At Clark she came into her full powers as a teacher and as a director of research. Fortunate indeed were the students who worked under her effective direction. She was a rigorous taskmaster but gave freely of her time and energy. She possessed the ability to bring out the best efforts of her special students and guided their progress in her own inimitable way.

Although during the last decade of her life, Miss Semple's thoughts and efforts centered on her Mediterranean work and her interest and enthusiasm in the subject grew with each passing year, she found time to accept a limited number of lecture invitations. She gave a distinguished series of lectures at Vassar College, a recognition from her Alma Mater which she prized greatly. She appeared in special series of lectures before the department of geology and geography at the University of Michigan and also lectured at the University of Kentucky and several other colleges and universities. In 1925 she taught during the second semester at the University of California at Los Angeles and found the change from the rigors of the New England winter a gratifying relaxation.

In the late autumn of 1929 Miss Semple was stricken with a serious heart attack. As a result of this affliction she was in a hospital in Worcester continuously until the following summer. For weeks running into months her colleagues and friends despaired of her life, and none thought she would be able to finish her book on the Mediterranean. They reckoned, however, without the indomitable spirit of her courageous mind. Bit by bit she fought her way back to activity again. By summer she was working in bed on a schedule of two hours per day at most. In September she was moved to a home facing the Clark campus and there, still working in bed, Miss Semple not only continued her work on the Mediterranean manuscript but began a revision of *American History and Its Geographic Conditions*. In this revision

she had the active coöperation of her colleague, Clarence F. Jones, and with his aid the project was completed and is announced for publication in 1933. Miss Semple remained in Worcester during the winter and spring of 1931 but in early summer was moved to comfortable quarters at Petersham, Massachusetts. There, with the assistance of a former student in the documentation and editorial phases of the work, she endeavored to complete the Mediterranean volume. Progress was slow but finally the task was finished—the great work completed. No more courageous page has been written into the annals of American science or of American letters. In October of 1931 Miss Semple became strong enough to be taken south. She remained at Asheville, North Carolina, for a time and then went to West Palm Beach, Florida, where she died on May 11, 1932.

In spite of a life replete with arduous work and high accomplishment, Miss Semple found time for a wide circle of friends. They were drawn from all walks of life and included senators, governors, lawyers, physicians, business men, writers, actors, artists, scientists and many others. She was welcomed in many circles and was much sought after by men and women of affairs. Professionally she knew and corresponded with eminent men and women in practically all centers where geographical science is represented. Everywhere she was honored for her eminent achievements, respected for her honesty of purpose, and welcomed for her facile mind and her attractive personal qualities.

Miss Semple was a charter member of the Association of American Geographers. Her first appearance on the programs of the Association was at the Chicago meeting of 1907 where her title read "Oceans and Enclosed Seas: A Study in Anthropogeography." Subsequently she appeared on seven other programs; her final paper being read for her at the Worcester meeting in 1930. She served a term on the Council of the Association and was president at the Washington meeting in 1921. She received many honors both at home and abroad. In 1914 the American Geographical Society conferred upon her its Cullom Gold Medal "For her distinguished contributions to the science of Anthropogeography." At its June Convocation in 1923 the University of Kentucky honored Miss Semple with its LL.D. degree—a recognition highly appropriate from her home state. The university, moreover, has established in its new library building an Ellen Churchill Semple Room, where Miss Semple's large private library is housed. One

of her final honors was the award by the Geographic Society of Chicago of the Helen Culver Gold Medal, the inscription on which reads "To Ellen Churchill Semple for distinguished leadership and eminent achievement in geography."

Ellen Churchill Semple played a distinctive rôle in American geography. She was one of the small but distinguished group whose pioneer work established geography on a firm and lasting foundation in this country. She brought to geography personal qualities which were the outgrowth of a distinguished family, a youth spent in cultivated surroundings, a long period of thorough training and a broad and varied experience. Many a friend and many a student has profited by her possession of these personal qualities. She graced the meetings as well as adorned the programs of the Association. She was loyal to her friends, her students, her colleagues, and her science. She introduced anthropogeography to this country and by her work enriched the literature of geography enormously. She possessed a distinctive style of writing—a style which gave her work high literary as well as scientific merit. She attained a position of leadership in her chosen field and used her leadership wisely for the advancement of the science which she loved.

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J. Paul Goode

WILLIAM H. HAAS AND HAROLD B. WARD

John Paul Goode, one of the charter members of the Association of American Geographers, passed away August 5, 1932. With his going the Association lost a valuable member, the science of geography lost a brilliant contributor, and the world lost an inspiring teacher.

Professor Goode was a natural teacher and a true geographer. He was a man who loved his fellowmen, not only because he understood mankind with its privations and ambitions but because he had experienced the joy and success of hard work both mental and physical. Born on a farm near Stewartville, Minnesota, November 21, 1862, he was a product of the stern pioneer life of a land of long, cold winters. In later years, he was fond of telling of his struggle to gain an education. He worked his way through preparatory school and the University of Minnesota. Gifted with a beautiful voice, he earned a part of his income by singing in choirs and quartettes. Even during the last few months of his life, when so consciously aware of a weakened heart, he played in a small orchestral group of his inspiration, made up of the boys and girls of the neighborhood who had gathered about him as a friend whom they loved because he seemed to understand so fully their individual hopes and ambitions.

After receiving a Bachelor of Science degree from Minnesota in 1889, he was called to teach Natural Science in the Minnesota State Normal at Moorhead and loved his work so well that he stayed in that position until 1898, with periods out for graduate work at Harvard in 1894 and at the University of Chicago as fellow in geology in 1896-7. The born geographer was developing during those first years of teaching so that he was well prepared to conduct geography classes at the University of Chicago during the summers of 1897-1900 and to accept a position in 1899 at the Eastern Illinois State Normal as Professor of Physical Science and Geography. The lure of graduate study drove him on, however, so that in 1901 he entered the University of Pennsylvania where he received his Ph.D. and remained until 1903 as



JOHN PAUL GOODE
November 21, 1862—August 5, 1932

instructor in Geography and director of the Geographical Society of Philadelphia.

Because he had already become identified with the University of Chicago by his summer classes, it is not surprising that in 1903 he was called to a permanent position in the Geography Department of that institution. One of his favorite expressions was, "Many are called but few are chosen." He was truly one of the chosen and from the outset he lived and worked in an atmosphere of geographic interest. The Department grew rapidly and Professor Goode worked with great enthusiasm to develop geographers and send them out as teachers.

His influence soon extended far beyond the classroom. He served as co-editor of the *Journal of Geography* from 1901 to 1904, helped to organize the Geographic Society of Chicago, was its president during the years 1904-1906, and retained a directorship until 1929. During 1907-1908 he acted as General Secretary of the American Association for the Advancement of Science. He became known as an expert in Economic Geography and, as such, in 1908 was sent by the Chicago Harbor Commission to study the leading ports of Europe. His report, extensive and complete, was published under the title "The Development of Commercial Ports." The following year he was appointed by President Taft to assist in conducting a distinguished group of Japanese financiers, the Honorary Commercial Commissioners, in a tour of America, visiting 55 leading cities. His interest in the Far East led to an invitation in 1911 by the Philippine Government to lecture to the Educational Assembly at the summer capital at Baguio. After this service he traveled and studied in the Philippines, China, and Japan for the remainder of the year.

These contacts with peoples of other lands were not merely casual events in Professor Goode's life. He made many lasting friendships and gained a sincere and sympathetic understanding of local problems. Many geography teachers of today received a broad world outlook from Dr. Goode and are because of him instructing young people to appreciate international problems.

Professor Goode's students went forth from the University into many fields of work and remembered the inspiration they received from his classroom lectures. As a result, invitations poured in to him to speak before community assemblies, teachers' associations, business groups, and many other types of organizations.

With characteristic energy and thoroughness, he developed the art of lecturing before the public to a degree that won him acclaim from all. During 1926, at least seventy engagements, confined to Associations of Commerce, Geographical and Scientific Societies, Teachers' Associations, and University groups, were filled by Dr. Goode. His courses of lectures were in four groups consisting of five lectures to each group, each lecture illustrated by lantern slides showing mainly maps and graphs. He brought his interpretation of geography with rare charm and striking vividness to all parts of the United States and to every large city.

Dr. Goode first appeared on the program of the Association of American Geographers at the Chicago meeting of 1907. Two addresses were given, one entitled "An Electrical Compensator for the Foucault Pendulum," the other "A College Course in Ontography." These topics show his versatility and wide range of interests at that time. In later years one of his favorite avocations was experimenting in dynamics in his home laboratory.

His major interest which soon occupied most of the time he devoted to research was demonstrated at the meeting of the Association in Baltimore in 1908 when he spoke on "The Requisites of a School Wall Map." Professor Goode became the leader in the fight against the Mercator Projection for school maps. He deplored the fact that it was used so extensively and started his great work on the problem of producing an equal-area projection that could be used for world maps. It was largely his aggressive antagonism to the "evil Mercator" that spurred him on to the accomplishment of the solution of the problem that had baffled many eminent cartographers.

He spoke before the Association eleven times after the Baltimore meeting and at each of his appearances, with one exception, he recorded advancement in map making. Five of these addresses marked high points in his career as a progressive cartographer,—at Chicago in 1914, "A New Series of Wall Maps for Schools"; at New York in 1916, "New Idea for a World Map: A Substitute for Mercator's Projection (Mollweide's Homolographic with Interruption)"; at Cincinnati in 1923, "The Homolosine Projection"; at Philadelphia in 1928 where his Presidential Address, "The Map as a Record of Progress in Geography", was followed by many papers on the uses and construction of maps; and at New

York in 1928, "The Polar Equal Area (A new projection for the World Map)".

Of great significance were his announcements at New York in 1916 and at Cincinnati in 1923. The interrupted homolographic represented a distinct advance and his homolosine projection was hailed as the solution of the problem with which he had wrestled so many years. These projections initiated a new epoch in mapping and have been the inspiration which led to many other efforts. They, or modifications of them, have been used in all important cartographic institutions and in many governmental bureaus.

During all the years that Dr. Goode was teaching, lecturing and working on the problems of wall maps, his chief ambition was to produce a School Atlas that would stand as the finest accomplishment of his life. It was, therefore, a great source of satisfaction to him when his preliminary Atlas was published in 1923, and the climax of his life work was reached when the revised and enlarged edition was completed shortly before he died. Professor Goode wrote the introduction "to the student and teacher" and offered it "with the sincere hope that it will help toward the better teaching of geography, and toward a greater appreciation of fine maps and a keener pleasure in their use, both during and after school days." It represents a great achievement of a master technician and an eminent geographer.

Official recognitions of Dr. Goode's splendid contributions to geography were many and varied but his chief pleasure was the loyalty of his students and friends. The closing years of his life were fraught with many discouragements and a deep sorrow from which he never fully recovered. The Hon. Katherine Hancock Goode, helpmate and companion in his triumphs, inspirer and guide in many critical periods, a brilliant, courageous and home-loving woman who had sacrificed herself for the good of her community, passed away January 13, 1928. Professor Goode had collapsed with an unruly heart on December 11 and was unable to help or see Mrs. Goode during the last four weeks of her life. As he expressed it afterward, "That was the limit in wicked tragedy." But with characteristic will and determination he recovered from that illness and was back at work the following spring "under strict injunction to go slow—do one man's work." His last brief illness came while he was at his summer home, happy and satisfied,

receiving the many messages of congratulation on the publication of his School Atlas.

A host of economic geographers stand indebted to Professor Goode for his original ideas and his inspiring leadership. He was a great American cartographer, a pioneer in modern geography, and at all times a generous, kindly, understanding friend of man.

Henry Grier Bryant

FRANK E. WILLIAMS

Henry Grier Bryant died December 7th, 1932, at the age of 73, thus bringing to an end an active and productive career. He was one of the group who had been "invited and accepted" prior to the organization of the Association of American Geographers in Philadelphia, December, 1904. He later served as president (in 1913). He was a great traveler and explorer and a worthy follower of Kane, Heilprin, Melville and others who helped to bring fame to the city of "Brotherly Love."

He was a descendant of an old New England family. After his graduation from Princeton and the Pennsylvania Law School, he took over the management of his father's estate and for a time was Secretary of the Edison Electric Light Company. An extended tour of Europe in his early twenties lured him into the field of exploration and travel, and although he maintained his practice of law, he became more and more interested in exploration and other phases of Geography.

One of his first notable adventures was the expedition to explore the Grand Falls of Labrador in 1891. Up to this time, the existence of these falls was known only through the vague accounts of the Indians and of several travelers into that region many years before. He is said to have made the first photograph of these impressive falls. His further interest in Labrador led to a reconnaissance of the coast as far north as the Moravian Mission at Nain in 1909. In 1912 he spent three months in exploration in the Saint Augustine River territory in the southeastern part of Labrador. He secured geographical, geological, and entomological material of great value and revised the map of a considerable portion of that region. When the boundary between Labrador and Quebec came up for location his maps were consulted by the British Embassy.

He early became interested in Arctic Exploration and was second in command in the Peary Relief Expedition under Professor Heilprin in 1892. In 1894 he was commander of the Peary Auxiliary Expedition which left St. Johns, Newfoundland, in July and returned the following September. His mind rather naturally



HENRY GRIER BRYANT
November 7, 1859—December 7, 1932

turned to Polar investigations and this led him to finance the project of Commodore Melville, who in 1899 distributed a series of drift casks to determine the direction of circumpolar currents.

Mountain climbing combined with exploration of unfrequented peaks commanded a great deal of his attention. On such expeditions he made many trips to the mountains of Western America. In 1909 he ascended Eagle Peak in the Selkirks. In the summer of 1909 he was unsuccessful in an attempt to reach the top of Mt. Assiniboine from the south side but carried out his plans in mapping almost 2000 square miles of the area. In 1904 he visited Popocatepetl. In 1907 he was on an expedition which was unsuccessful in scaling Mt. St. Elias, but was able to negotiate the difficult crossing of the Malaspina Glacier. He climbed many of the important Alpine Peaks, as well as Nantai-San in Japan, Pindauro Talagala in Ceylon, Mauna Loa in Hawaii, and Bromo Volcano in Java.

During his long career he made the acquaintance of the foremost geographers and through his personal contacts as well as by his travels, explorations, and writings he was internationally known. As a consequence of his wide acquaintance and in recognition of his services he was a member of a large number of clubs and societies. He was a Fellow of the Royal Geographical Society for life; Honorary Member of the Club Alpine Français; Corresponding Member of the Geographical Society of Geneva and of the Geographical and Anthropological Society of Stockholm. He was a member of the Appalachian Mountain Club and was for a time a Councilor of Topography and Exploration. He was an original member of the American Alpine Club, and its President for three years—1914-17. He was an Officier de l'Académie Française and was prominent for several years in the work of the American Philosophical Society. He also had interest and sympathies in wider fields as is shown in his active membership in the Contemporary Club, Art Club, University Club, Corinthian Yacht Club, Philadelphia Country Club, and Princeton Club.

One of Mr. Bryant's chief interests and that for which he was perhaps best known in Philadelphia, was his work in and for The Geographical Society of Philadelphia. He was made a member in 1891 and soon became active in its affairs. Besides being active on the Board of Directors, he was Recording Secretary for four years, First Vice-President fifteen years, and President

thirteen years. He often presided and carried on the executive work of the Society, even as Vice-President. In his will he remembered the Society generously. He showed his wide interest in geography by providing a chair for a Professorship in Geography at his Alma Mater, Princeton.

Mr. Bryant was a modest and retiring man; indeed markedly so, but he had initiative and the ability to plan. These faculties plus perseverance and determination fitted him for the rôle of explorer. Exploration coupled with organization to promote field work and to preserve the literary record connected with it, were the dominant pleasures and interests of his life.

His friendships were many, but apt to be rather formal, due largely to his shyness. But though his intimate friends were few, he was loyal to them and relied upon their fidelity in return. He was honest, charitable and mindful of the better things of life—"a life devoted to science and the humanities."

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